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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,514	10/30/2003	Steven M. Clements	RPS920030109US1	7659
47052	7590	08/08/2006	EXAMINER	
SAWYER LAW GROUP LLP			CRAWFORD, JASON	
PO BOX 51418				
PALO ALTO, CA 94303			ART UNIT	PAPER NUMBER
			2819	

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/697,514	CLEMENTS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jason Crawford	2819	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 30 October 2003.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-21 is/are pending in the application.  
    4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) 1-7 and 15-21 is/are allowed.

6)  Claim(s) 8-10 is/are rejected.

7)  Claim(s) 11-14 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee (US 6,256,235).

In regards to Claim 8, Lee discloses of a method comprising providing portions of a transmitter signal path in Fig 6 and 10 as parallel segments (21A-C, DRIVER A-C) and independently enabling each of the parallel segments (via EN\_AP, EN\_AN, EN\_BP, EN\_BN, EN\_CP, EN\_CN respectively) to control output signal amplitude (Column 5 Lines 24-32). (Fig 6, 10, Column 4 Lines 25-67 and Column 5 Lines 1-32)

In regards to Claim 9, Lee discloses of the having the parallel segments (21A-C, DRIVER A-C) being comprised of a prebuffer (predrivers 21A-C respectively) and an output stage (DRIVER A-C respectively). (Fig 6, 10, Column 4 Lines 25-67 and Column 5 Lines 1-32)

In regards to Claim 10, Lee discloses of the step of independently enabling each of the parallel segments (21A-C, DRIVER A-C) further comprises utilizing a plurality of input signals (EN\_AP, EN\_AN, EN\_BP, EN\_BN, EN\_CP, EN\_CN) for the parallel segments (21A-C, DRIVER A-C) that selectively enable the parallel segments (21A-C, DRIVER A-C) in order to balance desired amplitude and pre-emphasis needs in the

transmitter signal path (Column 5 Lines 24-32). (Fig 6, 10, Column 4 Lines 25-67 and Column 5 Lines 1-32)

***Allowable Subject Matter***

2. Claims 1-7 and 15-21 are allowed. The following is an examiner's statement of reasons for allowance:

In regards to Claim 1, the prior art does not directly disclose of a serial link transmitter circuit with independently enabled parallel segments comprised of prebuffers and output stages that achieve multiple power levels of pre-emphasis while maintaining substantially constant propagation delay, nor would it have been obvious to one of ordinary skill in the art to do so. Claims 2-7 are also allowed as being dependent on the allowable claim 1.

In regards to Claim 15, the prior art does not directly disclose of a system with a differential input signal and a plurality of independently enabled parallel segments comprised of prebuffers and output stages that achieve multiple power levels of pre-emphasis while maintaining substantially constant propagation delay in the signal path of the differential signal, nor would it have been obvious to one of ordinary skill in the art to do so. Claims 16-21 are also allowed as being dependent on the allowable claim 15.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Claim 11-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

In regards to Claim 11, the prior art does not directly disclose of the circuit of claim 8 further comprising undelayed and delayed segments to balance current steering with pre-emphasis levels in the transmitter signal path, nor would it have been obvious to one of ordinary skill in the art to do so.

In regards to Claim 12, the prior art does not directly disclose of the circuit of claim 9 providing a bypass path in the prebuffer stage circuitry to implement a controllable idle state in the segments, nor would it have been obvious to one of ordinary skill in the art to do so.

In regards to Claim 13, the prior art does not directly disclose of the circuit of claim 9 further comprising tail current and resistive load devices in the prebuffer circuitry, nor would it have been obvious to one of ordinary skill in the art to do so.

In regards to Claim 14, the prior art does not directly disclose of the circuit of claim 8 further comprising a control element to allow inversion of a last delayed bit to achieve a polarity change of the pre-emphasis signal, nor would it have been obvious to one of ordinary skill in the art to do so.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Crawford whose telephone number is 571-272-6004. The examiner can normally be reached on Monday - Friday 7am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rex Barnie can be reached on 571-272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMC

*Rexford Barnie*  
REXFORD BARNIE  
SUPERVISORY PATENT EXAMINER